

IN THE CLAIMS:

Please amend the claims as follows:

- 1 1. (Previously Presented) In a machine vision system having a plurality of distinct and
2 separate vision processors (VPs), each VP being on a respective VP computing platform, and at
3 least one distinct and separate machine vision user interface (UI), the at least one distinct and
4 separate machine vision UI being on a respective distinct and separate machine vision UI
5 computing platform, a method for instructing a machine vision UI in communication with a first
6 distinct and separate VP to establish communication with a second distinct and separate VP, the
7 method comprising:
- 8 providing a first distinct and separate VP with a link function, the first distinct and
9 separate VP being on a first respective distinct and separate VP computing platform connected to
10 a network, the link function being a control function executable by the first distinct and separate
11 VP,
- 12 the link function being both for enabling a user to configure any second distinct and
13 separate VP connected to the network using the at least one distinct and separate machine vision
14 UI on a respective distinct and separate machine vision UI computing platform connected to the
15 network, and for establishing communication via the network between the any second distinct
16 and separate VP of the plurality of VPs and the at least one distinct and separate machine vision
17 UI on the respective distinct and separate machine vision UI computing platform, the any second
18 distinct and separate VP being on a second respective distinct and separate VP computing
19 platform,

20 the communication via the network established by the link function enabling a
21 continually updated image display on the at least one distinct and separate machine vision UI
22 representing a current state of the any second distinct and separate VP connected to the network;
23 executing the link function so as to issue instructions via the network from the first
24 distinct and separate VP to the distinct and separate machine vision UI to establish
25 communication via the network with the any second distinct and separate VP; and
26 performing at least part of a machine vision task configured by the at least one distinct
27 and separate machine vision UI, using at least one of the first distinct and separate VP and the
28 any second distinct and separate VP, in accordance with the instructions issued by the first
29 distinct and separate VP upon execution of the link function.

1 2. (Previously Presented) The method of claim 1, wherein the link function includes:
2 a VP control function having a plurality of parameters, including at least an identifier of
3 the second VP.

1 3. (Previously Presented) The method of claim 1, wherein executing the link function
2 includes:
3 clicking on a graphical representation of the link function displayed by the machine
4 vision UI.

1 4. (Previously Presented) The method of claim 3, wherein the graphical representation of
2 the link function is an underlined text string displayed by the machine vision UI.

1 5. (Previously Presented) The method of claim 1, wherein instructions from the first VP to
2 the machine vision UI includes:

3 a plurality of parameters, including at least an identifier of the second VP, and at least
4 one of a description of a view of the second VP, and a cursor position of the second VP.

1 6. (Previously Presented) The method of claim 1, wherein executing the link function is
2 initiated by a user.

1 7. (Previously Presented) The method of claim 6, wherein executing the link function is
2 initiated by a user via the at least one machine vision UI.

1 8. (Previously Presented) The method of claim 7, wherein the at least one machine vision
2 UI includes a check box.

1 9. (Previously Presented) The method of claim 7, wherein the at least one machine vision
2 UI includes a radio button.

1 10. (Previously Presented) The method of claim 1, wherein executing the link function is
2 initiated by an external event.

1 11. (Original) The method of claim 10, wherein the external event is an industrial process
2 event.

1 12. (Previously Presented) The method of claim 10, wherein the external event is a change
2 in the state of a sensor.

1 13. (Previously Presented) The method of claim 1, wherein executing the link function is
2 initiated by a programmatic decision

1 14. (Previously Presented) The method of claim 1, wherein executing the link function is
2 initiated by a human decision.

1 15. (Previously Presented) The method of claim 1, wherein executing the link function
2 includes:
3 including the link function in a function execution sequence of the VP.

1 16. (Previously Presented) The method of claim 1, wherein the link function also terminates
2 communication with the first VP in addition to establishing communication with the second VP.

1 17. (Previously Presented): The method of claim 1, wherein the link function enables local
2 dynamic display of images provided by a camera of the second VP on the at least one machine
3 vision UI.

1 18-19. (Canceled)

1 20. (Previously Presented) In a machine vision system having a plurality of distinct and
2 separate vision processors (VPs), each VP being on a respective distinct and separate VP
3 computing platform and at least one distinct and separate machine vision user interface (UI), the
4 at least one distinct and separate machine vision UI being on a respective distinct and separate
5 machine vision UI computing platform, a method for instructing a machine vision UI in
6 communication with a first distinct and separate VP to establish communication with a second
7 distinct and separate VP, the method comprising:

8 providing a graphical representation, included in the at least one distinct and separate
9 machine vision UI, the graphical representation being adapted to respond to user action so as to
10 cause the first distinct and separate VP on a first respective distinct and separate VP computing
11 platform connected to a network to instruct the at least one distinct and separate machine vision
12 UI on a respective distinct and separate machine vision UI computing platform connected to the
13 network to establish communication via the network with any second distinct and separate VP on
14 a second respective distinct and separate VP computing platform connected to the network,

15 the communication via the network enabling a continually updated image display on the
16 at least one distinct and separate machine vision UI representing a current state of the any second
17 distinct and separate VP, and enabling a user to configure the any second distinct and separate
18 VP using the distinct and separate machine vision UI; and

19 performing at least part of a machine vision task configured by the at least one distinct
20 and separate machine vision UI, using at least one of the first distinct and separate VP and the

21 any second distinct and separate VP, in accordance with the instructions issued by the first
22 distinct and separate VP.

1 21. (Canceled)

1 22. (Previously Presented) The machine vision system of claim 20, wherein the network
2 supports a TCP/IP network protocol.

1 23. (Previously Presented) The machine vision system of claim 20, wherein the user action
2 includes selecting the graphical representation.

1 24. (Previously Presented) The machine vision system of claim 20, wherein the user action
2 is a mouse click upon the graphical representation.

1 25. (Original) The machine vision system of claim 20, wherein the graphical representation
2 is an underlined text string.

1 26. (Previously Presented) A user interface (UI) for a machine vision system having a
2 plurality of distinct and separate vision processors (VPs) including a first distinct and separate
3 VP on a first respective distinct and separate VP computing platform, and a second distinct and
4 separate VP on a second respective distinct and separate VP computing platform, the user
5 interface comprising:

6 a spread sheet; and
7 a graphical representation, the graphical representation being incorporated in the
8 spreadsheet, the graphical representation being adapted to respond to user action so as to cause a
9 first distinct and separate VP on a first respective distinct and separate VP computing platform to
10 instruct the UI to establish communication via a network with any second distinct and separate
11 VP of the plurality of VPs on a second respective distinct and separate VP computing platform,
12 the communication via the network enabling a continually updated image display on the UI
13 representing a current state of the any second distinct and separate VP, and enabling a user to
14 configure the any second distinct and separate VP using the at least one UI;
15 wherein at least one of the first distinct and separate VP and the any second distinct and
16 separate VP performs at least part of a machine vision task in accordance with the instructions
17 issued by the first distinct and separate VP, the machine vision task being configured by the at
18 least one distinct and separate machine vision UI.

1 27. (Previously Presented) The user interface (UI) of claim 26, wherein the graphical
2 representation is further adapted to respond to user action so as to cause the UI to terminate
3 communication with the first VP of the plurality of VP.

1 28. (Original) The user interface (UI) of claim 26, wherein the graphical representation is an
2 underlined text string.

1 29. (Previously Presented) The user interface (UI) of claim 26, wherein the graphical
2 representation is an ionic representation.

1 30. (Previously Presented) A machine vision system comprising:
2 a plurality of distinct and separate vision processors (VPs), each VP being on a respective
3 distinct and separate VP computing platform connected to a network;
4 at least one distinct and separate machine vision user interface (UI), the at least one
5 distinct and separate machine vision user interface (UI) being on a respective distinct and
6 separate machine vision UI computing platform connected to the network, the machine vision UI
7 being in communication via the network with a first distinct and separate VP of the plurality of
8 VPs on a first respective distinct and separate computing platform, the machine vision UI
9 including:

10 a graphical representation visible to a user, the graphical representation being adapted to
11 respond to user action so as to cause the first distinct and separate VP to instruct the distinct and
12 separate machine vision UI to establish communication via the network with any second distinct
13 and separate VP of the plurality of VPs on a second respective distinct and separate computing
14 platform, the communication via the network enabling a continually updated image display on
15 the distinct and separate machine vision UI representing a current state of the any second VP,
16 and enabling a user to configure via the network the any second distinct and separate VP using
17 the distinct and separate machine vision UI;

18 wherein at least one of the first distinct and separate VP and the any second distinct and
19 separate VP performs at least part of a machine vision task in accordance with the instructions

20 issued by the first distinct and separate VP, the machine vision task being configured by the at
21 least one distinct and separate machine vision UI.

1 31. (Canceled)

1 32. (Previously Presented) The machine vision system of claim 30, wherein the network
2 supports a TCP/IP network protocol.

1 33. (Original) The machine vision system of claim 30, wherein user action is a mouse click
2 upon the graphical representation.

1 34. (Original) The machine vision system of claim 30, wherein the graphical representation
2 is an underlined text string.